## MONTHLY NOTICES

OF THE

## ROYAL ASTRONOMICAL SOCIETY.

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April 9, 1873.

No. 6.

PROFESSOR CAYLEY, President, in the Chair.

E. A. Sturman, Esq., Annerley; John Garbutt, Esq., Leeds;

William Tomlinson, Jun., Esq., Nelson, New Zealand; and T. W. Backhouse, Esq., West Hendon House, Sunderland,

were balloted for and duly elected Fellows of the Society.

Transmission of Free Messages on Astronomical Subjects over the Transatlantic Cables.

A very important concession has been made to the Smithsonian Institution by the Directors of the Associated Trans-Atlantic Cable Companies, who have agreed to transmit gratuitously between Europe and the United States, a limited number of short messages on astronomical subjects. Under this arrangement two telegrams have already been received from the United States by the Astronomer Royal, who on his part has undertaken, at the request of Dr. Henry, Secretary of the Smithsonian Institution, to forward from Europe any message announcing an important astronomical discovery. The Directors of the Associated Companies have consented that ten messages, of ten words each, may be sent free over the cables annually. This liberal concession on the part of the Directors cannot be too highly appreciated by astronomers generally, and especially by the Fellows of this Society.

In conformity with this agreement the Astronomer Royal will

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be prepared to forward any important astronomical message, limited to ten words, which may be sent to him for this purpose from the principal European astronomers.

Royal Observatory, Greenwich, April 8, 1873.

Chinese Observations of Solar Spots. By Mr. John Williams.

Having lately become possessed of a copy of the celebrated Encyclopædia of Ma Twan Lin, I found, on examining the astronomical sections of that work, a considerable number of observations of solar spots, extending over a period of 904 years, and, considering that some account of these ancient observations might be of interest to the Society, I have requested permission to lay before you a translation of them, in the hope that they may be of some service to such of the Fellows as may be more particularly

engaged in the investigation of these peculiar phenomena.

The Encyclopædia of Ma Twan Lin is considered not only by the Chinese themselves, but also by such European Sinologists as have had occasion to refer to it, as a most remarkable and trustworthy work. Many eminent writers speak of it in the highest terms of approbation, and among these I take the opportunity of calling your attention to the opinion of Abel Remusat, the author of a well-known and excellent Chinese grammar, who, after giving, in that work, an account of a number of the best Chinese works on different subjects, concludes thus:- "And above all, the excellent work of Ma Twan Lin, entitled Wan Heen Tung Kao, the finest monument of Chinese literature, a vast collection of memoirs on all sorts of subjects, a treasure of erudition and criticism, in which all the materials that Chinese antiquity has left us, relating to their religion, legislation, rural and political economy, commerce, agriculture, government, natural history, physical geography, and ethnology, will be found, brought together, classed and discussed, in admirable order, method, and lucidity,—in short, a production which, as I have had occasion before to remark elsewhere, is in itself a complete library, and which, did their literature offer nothing else of value, would deserve that the Chinese language should be acquired, were it for no other purpose than to read this work."

My copy of this highly esteemed work is in 100 Chinese volumes. The matters treated of are arranged under 24 principal heads. These are divided into 348 sections or chapters, which have also numerous subdivisions. The astronomical portion consists of 17 chapters, Nos. 278 to 295 inclusive. The subjects treated of are—The general distribution of the stars in the heavens, comprising the asterisms in the three great spaces and the twenty-eight stellar divisions, the whole of which are